

**OPINION OF COSTS**

The following opinions of cost are for select facilities in the downtown including Bear Creek Parkway, Cleveland Street, Redmond Way, Avondale Road, and the extension of 164th across the BNSF right of way. These costs are intended as planning level order of magnitude costs based on conceptual level engineering and therefore include a high contingency factor. Further engineering should be undertaken to develop more refined cost estimates. Assumptions are stated on each cost sheet. Generally opinions of costs for intersecting streets are included to the curb return. It is assumed that the projects are standalone projects and can be developed independent of improvements to intersecting streets. During implementation, it is assumed a determination will be made as to how to further develop the project and whether the scope and budget for the project needs to be expanded to included related facilities.

Redmond Master Plan Conceptual-Level Opinion of Cost Summary Sheet					
Date: 11/19/2002 Rev. 7/08/03					
Cleveland Modification					
Prepared by: R. Moreno/ W. Lider					
Checked by: K. Nakano					
Item	Quantity	Units	Unit Price (2002 \$)	Cost (x 1000)	Subtotal (x 1000)
1. Site Prep					\$26
1.1 Clearing and Grubbing	0	ACRE	\$3,300	\$0	
1.2 Pavement Removal	7,605	SF	\$3	\$26	
1.3 Remove Structure/Obstruction	0	SF	\$44	\$0	
2. Earthwork					\$0
2.1 Structure Excavation	0	CY	\$17	\$0	
2.2 Borrow	0	CY	\$33	\$0	
2.3 Roadway Prism	10% of Section 4.3			\$0	
3. Structures					\$0
3.1 Bridge	0	SF	\$154	\$0	
4. Pavement					\$740
4.1 Grinding Asphalt Pavement	12,000	SF	\$2	\$27	
4.2 Asphalt Pavement Overlay	108,000	SF	\$7	\$713	
4.3 New Asphalt Pavement	0	SF	\$11	\$0	
5. Drainage					\$1,166
5.1 Detention & Water Quality Facility	120,000	CF	\$4	\$425	
5.2 Storm Sewer Pipe 12inch DIAM	3,725	LF	\$165	\$615	
5.3 Catch Basin Type 2 48inch DIAM	10	EA	\$2,750	\$28	
5.4 Catch Basin Type 1	20	EA	\$1,100	\$22	
5.5 Wetland Mitigation (See note g below)	0% of Sections 1, 2 and 4			\$0	
5.6 Temporary Erosion & Sediment Control	10% of Sections 1, 2 and 4			\$77	
6. Traffic					\$1,128
6.1 Lighting	40	EA	\$8,250	\$330	
6.2 Traffic Signal	3	EA	\$165,000	\$495	
6.3 Sidewalk curb and gutter	6,700	SY	\$28	\$185	
6.4 Signs ( See Note h below)	3,000	LF	\$8	\$24	
6.5 Pavement Markings	3,000	LF	\$2	\$7	
6.6 Traffic Control	3% of Secs. 1, 2, 3, 4, 5.1-4, 6.1-5			\$87	
7. Streetscape Restoration	5% of Sections 1, 2, 3, 4, 5 and 6			\$154	
8. Construction Subtotal (Items 1, 2, 3, 4, 5, 6 and 7)					\$3,214
9. Contingencies	25% of Line 8			\$804	
10. Construction Subtotal (Items 1 through 9)					\$4,018
11. Mobilization	10% of Line 10			\$402	
12. Construction Subtotal (Lines 10 and 11)					\$4,419
13. Sales Tax	Rule 171			\$0	
14. Subtotal (Lines 12 and 13)					\$4,419
15. Construction Engineering & Contingencies	12% of Line 14			\$530	
16. Construction Total (Lines 14 and 15)					\$4,950
17. Design Engineering	15% of Line 16				\$742
18. General Administration	15% of Line 16				\$742
19. Right Of Way (See note c below)					\$0
20. Subtotal (Lines 16, 17, 18 and 19)					\$6,435
Planning Level Project Cost Opinion			say		\$6,440

The following caveats should be considered when reviewing the cost estimates:

- Design assumptions based on aerial photogrammetry. Vertical alignment & cost assumptions have not been validated by design.
- Cost estimates are presented in year 2002 US dollars.
- Right-of-Way Based on Following Assumptions:  
R/W \$40/SF; \$5,000/Parcel; \$10,000/Lost Parking Stall.  
0 Parking Stalls Lost with this alternative. Assumes no R/W required.
- Legal fees not included.

Redmond Master Plan Conceptual-Level Opinion of Cost Summary Sheet					
Date: 11/19/2002 Rev. 7/08/03					
Avondale Modification					
Prepared by: R. Moreno/ W. Lider					
Checked by: K. Nakano					
Item	Quantity	Units	Unit Price (2002 \$)	Cost (x 1000)	Subtotal (x 1000)
1. Site Prep					\$363
1.1 Clearing and Grubbing	0.02	ACRE	\$3,300	\$1	
1.2 Pavement Removal	29,650	SF	\$3	\$98	
1.3 Remove Structure/Obstruction (Building)	6,000	SF	\$44	\$264	
2. Earthwork					\$40
2.1 Structure Excavation	0	CY	\$17	\$0	
2.2 Borrow	0	CY	\$33	\$0	
2.3 Roadway Prism	10% of Section 4.3			\$40	
3. Structures					\$0
3.1 Walls	0	SF	\$132	\$0	
4. Pavement					\$1,185
4.1 Grinding Asphalt Pavement	12,688	SY	\$2	\$28	
4.2 Asphalt Pavement Overlay	114,200	SF	\$7	\$754	
4.3 New Asphalt Pavement	36,600	SF	\$11	\$403	
5. Drainage					\$896
5.1 Detention & Water Quality Facility	119,000	CF	\$4	\$422	
5.2 Storm Sewer Pipe 12inch DIAM	1,775	LF	\$165	\$293	
5.3 Catch Basin Type 2 48inch DIAM	5	EA	\$2,750	\$14	
5.4 Catch Basin Type 1	8	EA	\$1,100	\$9	
5.5 Wetland Mitigation (See note g below)	0% of Sections 1, 2 and 4			\$0	
5.6 Temporary Erosion & Sediment Control	10% of Sections 1, 2 and 4			\$159	
6. Traffic					\$667
6.1 Lighting	17	EA	\$8,250	\$143	
6.2 Traffic Signal	2	EA	\$165,000	\$330	
6.3 Sidewalk curb and gutter	2,889	SY	\$28	\$80	
6.4 Signs (See note h below)	1,300	LF	\$8	\$11	
6.5 Pavement Markings	6,500	LF	\$2	\$15	
6.6 Traffic Control	3% of Secs. 1, 2, 3, 4, 5.1-4, 6.1-5			\$88	
7. Streetscape Restoration	5% of Sections 1, 2, 3, 4, 5 and 6			\$158	
8. Construction Subtotal (Items 1, 2, 3, 4, 5, 6 and 7)					\$3,309
9. Contingencies	25% of Line 8			\$827	
10. Construction Subtotal (Items 1 through 9)					\$4,137
11. Mobilization	10% of Line 10			\$414	
12. Construction Subtotal (Lines 10 and 11)					\$4,550
13. Sales Tax	Rule 171			\$0	
14. Subtotal (Lines 12 and 13)					\$4,550
15. Construction Engineering & Contingencies	12% of Line 14			\$546	
16. Construction Total (Lines 14 and 15)					\$5,096
17. Design Engineering	15% of Line 16				\$764
18. General Administration	15% of Line 16				\$764
19. Right Of Way (See note c below)					\$2,833
20. Subtotal (Lines 16, 17, 18 and 19)					\$9,458
Planning Level Project Cost Opinion			say		\$9,460

The following caveats should be considered when reviewing the cost estimates:

- Design assumptions based on aerial photogrammetry. Vertical alignment & cost assumptions have not been validated by design.
- Cost estimates are presented in year 2002 US dollars.
- Right-of-Way Based on Following Assumptions:  
R/W \$40/SF; \$5,000/Parcel; \$10,000/Lost Parking Stall.  
Approx. 30 parking stalls lost with this alternative + 1 Parcel + 63,200 SF of R/W required
- Legal fees not included.

Redmond Master Plan Conceptual-Level Opinion of Cost Summary Sheet					
Date: 11/20/2002 Rev. 7/08/03 Prepared by: R. Moreno/W. Lider Checked by: K. Nakano					
Bear Creek Modification					
Item	Quantity	Units	Unit Price (2002 \$)	Cost (x 1000)	Subtotal (x 1000)
1. Site Prep					\$32
1.1 Clearing and Grubbing	0.8	ACRE	\$3,300	\$3	
1.2 Pavement Removal	8,610	SF	\$3	\$29	
1.3 Remove Structure/Obstruction	0	SF	\$44	\$0	
2. Earthwork					\$30
2.1 Structure Excavation	0	CY	\$17	\$0	
2.2 Borrow	0	CY	\$33	\$0	
2.3 Roadway Prism	10% of Section 4.3			\$30	
3. Structures					\$0
3.1 Walls	0	SF	\$132	\$0	
4. Pavement					\$1,042
4.1 Grinding Asphalt Pavement	12,052	SY	\$2	\$27	
4.2 Asphalt Pavement Overlay	108,480	SF	\$7	\$716	
4.3 New Asphalt Pavement	27,120	SF	\$11	\$299	
5. Drainage					\$1,026
5.1 Detention & Water Quality Facility	136,000	CF	\$4	\$482	
5.2 Storm Sewer Pipe 12inch DIAM	2,800	LF	\$165	\$462	
5.3 Catch Basin Type 2 48inch DIAM	9	EA	\$2,750	\$25	
5.4 Catch Basin Type 1	19	EA	\$1,100	\$21	
5.5 Wetland Mitigation (See note g below)	0% of Sections 1, 2 and 4			\$0	
5.6 Temporary Erosion & Sediment Control	10% of Sections 1, 2 and 4.3			\$36	
6. Traffic					\$529
6.1 Lighting	30	EA	\$8,250	\$249	
6.2 Traffic Signal	1	EA	\$165,000	\$165	
6.3 Sidewalk curb and gutter	0	SY	\$28	\$0	
6.4 Signs (See note h below)	2,300	LF	\$8	\$18	
6.5 Pavement Markings	9,040	LF	\$2	\$20	
6.6 Traffic Control	3% of Secs. 1, 2, 3, 4, 5.1-4, 6.1-5			\$77	
7. Construction Subtotal (Items 1, 2, 3, 4, 5 and 6)					\$2,659
8. Contingencies	25% of Subtotal			\$665	
9. Construction Subtotal (Items 1 through 8)					\$3,323
10. Mobilization	10% of Line 9			\$332	
11. Construction Subtotal (Lines 9 and 10)					\$3,656
12. Sales Tax	Rule 171			\$0	
13. Subtotal (Lines 11 and 12)					\$3,656
14. Construction Engineering & Contingencies	12% of Line 13			\$439	
15. Construction Total (Lines 13 and 14)					\$4,094
16. Design Engineering	15% of Line 15			\$614	
17. General Administration	15% of Line 15			\$614	
18. Right Of Way (See note c below)				\$20	
19. Subtotal (Lines 15, 16, 17 and 18)					\$5,343
Planning Level Project Cost Opinion			say	\$5,350	

The following caveats should be considered when reviewing the cost estimates:

- a. Design assumptions based on aerial photogrammetry. Vertical alignment & cost assumptions have not been validated by design.
- b. Cost estimates are presented in year 2002 US dollars.
- c. Right-of-Way Based on Following Assumptions:
  - R/W \$40/SF; \$5,000/Parcel; \$10,000/Lost Parking Stall.
  - 0 Parking Stalls Lost with this Alternative assumes no R/W required
- d. Legal fees not included.
- e. Environmental documentation and citizen participation not included.
- f. Construction Management cost was estimated at 12% of the construction cost. Design Engineering was estimated

Redmond Master Plan Conceptual-Level Opinion of Cost Summary Sheet					
Date: 11/20/2002 Rev. 7/08/03 Prepared by: R. Moreno/ W. Lider Checked by: K. Nakano					
164th Ave NE Modifications					
Item	Quantity	Units	Unit Price (2002 \$)	Cost (x 1000)	Subtotal (x 1000)
1. Site Prep					\$27
1.1 Clearing and Grubbing	0.06	ACRE	\$3,300	\$1	
1.2 Pavement Removal	7,728	SF	\$3	\$26	
1.3 Remove Structure/Obstruction	0	LS	\$44	\$0	
2. Earthwork					\$3
2.1 Structure Excavation	0	CY	\$17	\$0	
2.2 Borrow	0	CY	\$33	\$0	
2.3 Roadway Prism	10% of Section 4.3			\$3	
3. Structures					\$0
3.1 Walls		SF	\$132	\$0	
4. Pavement					\$73
4.1 Grinding Asphalt Pavement	727	SY	\$2	\$2	
4.2 Asphalt Pavement Overlay	6,539	SF	\$7	\$44	
4.3 New Asphalt Pavement	2,421	SF	\$11	\$27	
5. Drainage					\$134
5.1 Detention & Water Quality Facility	14,000	CF	\$4	\$50	
5.2 Storm Sewer Pipe 12inch DIAM	390	LF	\$165	\$64	
5.3 Catch Basin Type 2 48inch DIAM	2	EA	\$2,750	\$6	
5.4 Catch Basin Type 1	4	EA	\$1,100	\$4	
5.5 Wetland Mitigation (See note g below)	0% of Sections 1, 2 and 4			\$0	
5.6 Temporary Erosion & Sediment Control	10% of Sections 1, 2 and 4			\$10	
6. Traffic					\$69
6.1 Lighting	4	EA	\$8,250	\$33	
6.2 Traffic Signal	0	EA	\$165,000	\$0	
6.3 Sidewalk curb and gutter	859	SY	\$28	\$24	
6.4 Signs (See note h below)	240	LF	\$8	\$2	
6.5 Pavement Markings	360	LF	\$2	\$1	
6.6 Traffic Control	3% of Secs. 1, 2, 3, 4, 5.1-4, 6.1-5			\$9	
7. Construction Subtotal (Items 1, 2, 3, 4, 5 and 6)					\$306
8. Contingencies	25% of Subtotal			\$76	
9. Construction Subtotal (Items 1 through 8)					\$382
10. Mobilization	10% of Line 9			\$38	
11. Construction Subtotal (Lines 9 and 10)					\$421
12. Sales Tax	Rule 171			\$0	
13. Subtotal (Lines 11 and 12)					\$421
14. Construction Engineering & Contingencies	12% of Line 13			\$50	
15. Construction Total (Lines 13 and 14)					\$471
16. Design Engineering	15% of Line 15			\$71	
17. General Administration	15% of Line 15			\$71	
18. Right Of Way (See note c below)				\$20	
19. Subtotal (Lines 15, 16, 17 and 18)					\$632
Planning Level Project Cost Opinion			say	\$640	

The following caveats should be considered when reviewing the cost estimates:

- a. Design assumptions based on aerial photogrammetry. Vertical alignment & cost assumptions have not been validated by design.
- b. Cost estimates are presented in year 2002 US dollars.
- c. Right-of-Way Based on Following Assumptions:
  - R/W \$40/SF; \$5,000/Parcel; \$10,000/Lost Parking Stall.
  - 2 Parking Stalls Lost with this alternative. Assumes no R/W required and railroad R/W already acquired by City.
- d. Legal fees not included.
- e. Environmental documentation and citizen participation not included.
- f. Construction Management cost was estimated at 12% of the construction cost. Design Engineering was estimated at 15% of the construction cost.